

**APC/Cyanine7 anti-human TCR Vγ9**

**Catalog # / Size:** 2256640 / 100 tests  
2256635 / 25 tests

**Clone:** B3

**Isotype:** Mouse IgG1, κ

**Immunogen:** Synthetic peptide from human EGFR

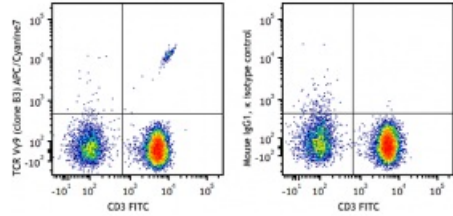
**Reactivity:** Human, Non-human primate

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

**Workshop Number:** V CD22.14

**Concentration:** Lot-specific



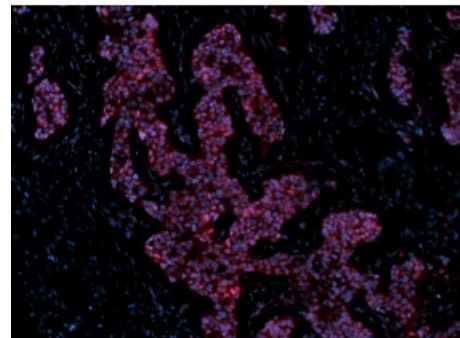
Human peripheral blood mononuclear cells were stained with CD3 FITC and TCR Vγ9 (clone B3) APC/Cyanine7 (left) or mouse IgG1, κ APC/Cyanine7 isotype control (right).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μL per million cells in 100 μL staining volume or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 μg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

**Application References:** 1. Van Rhijn I, et al. 2003. *Intl. Immunol.* 15:373.  
2. Yoshino N, et al. 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

**Description:** The V $\gamma$ 9 TCR is a variant of the TCR  $\gamma$  chain expressed on a subset of  $\gamma/\delta$  T cells. V $\gamma$ 9V $\delta$ 2 T lymphocytes, a major  $\gamma/\delta$  T cell subset in humans, recognize phosphoantigens, certain tumor cells, and cells treated with aminobisphosphonates. This cell population displays cytolytic activity against various tumor cells. The  $\gamma/\delta$  TCR is a heterodimeric TCR complex composed of covalently bound  $\gamma$  and  $\delta$  chains involved in antigen recognition and the non-covalently associated monomorphic proteins CD3 $\delta$ ,  $\gamma$ ,  $\epsilon$ , and  $\zeta$  chains.

**Antigen** 1. Scotet E, *et al.* 2005. *Immunity* 22:71  
**References:** 2. Rincon-Orozco B, *et al.* 2005. *J. Immunol.* 175:2144